

REMARKS

This is in response to the Office Action mailed on October 5, 2005. With this Amendment, claims 1, 4-8, 10-13, 16, 18, and 22-23 are amended. Claims 1-8, 10-13 and 15-26 are pending in this application.

Allowable Subject Matter

Applicant gratefully acknowledges that claim 10 was indicated to be allowable if rewritten in independent form. With this Amendment, Applicant has chosen to maintain the dependency of claim 10 from independent claim 1, because claim 1 is also in condition for allowance.

Claim Rejections - 35 U.S.C. § 112

In the Office Action, claim 1 was rejected under 35 U.S.C. § 112, second paragraph, for lack of antecedent basis for the phrase "the data store" in line 4. With this amendment claim 1 has been amended to provide the proper antecedent basis.

Claim Rejections - 35. U.S.C. § 103

In the Office Action, claims 1-8, 11-13 and 15-26 were rejected under 35 U.S.C. § 103(a) as being obvious over various combinations of the Moriconi patent (U.S. Patent No. 6,158,101), the Goldberg patent (U.S. Patent No. 5,748,890), the Wu patent (U.S. Patent No. 5,774,551), the Boitana patent (U.S. Patent No. 5,305,456), and the Kausik patent (U.S. Patent No. 6,263,446). With this amendment, claims 1, 4-8, 10-13, 16, 18, and 22-23 have been amended.

System claims 18-22 of the present application lay out the general structure of the computer security system. An understanding of the general structure of the computer system is useful to highlight the differences between the present invention and the prior art. As a result, the discussion below begins with a discussion of system claims 18-22 and is then followed by a discussion of method claims 1-8, 10-13, 15-17, and 23-26.

I. System Claims 18-22

In the Office Action, claim 18 was rejected under 35 U.S.C. § 103 (a) as being obvious over the combination of the Boitana patent in view of the Goldberg patent. However, neither the Boitana patent nor the Goldberg patent individually or in combination teach or suggest all of the claim limitations.

Claim 18 now includes: (1) a plurality of computer workstations, (2) a plurality of security providers, (3) a plurality of authentication/authorization managers, and (4) a plurality of security brokers. The claim also provides a description of each of these features. Each computer workstation has an operating system and a software application installed, and that the software application contains an embedded component. The plurality of security providers are for receiving permissions requests, authenticating a computer user, and authorizing permissions available to the computer user. In addition, each security provider has a security data store containing data related to authentication and authorization. The plurality of authentication/authorization managers are each associated with one of the security providers, for querying the security providers to authenticate the computer user and authorize permissions available to the computer user. The plurality of security brokers perform a number of functions. They receive permissions requests from the workstations, route permissions requests to one of the authentication/authorization managers, and pass authorized permissions to the workstations. Each security broker is a computer in network communication with the computer workstations and the security providers. Additionally claim 18 defines some of the communication capabilities between the elements of the computer security system. Specifically, each computer workstation is capable of communicating with each security broker. In addition each security broker is capable of communicating with each security provider through the associated authentication/authorization manager.

The Boitana patent does not teach or suggest either a plurality of security brokers or a plurality of security providers. The Office Action suggests that Boitana does teach a plurality of security providers and cites column 6, lines 15-25 in support of this proposition. However, column 6, lines 15-25 say nothing of a plurality of security providers. The system of the Boitana patent is illustrated in Fig. 5. The system includes three primary computers a local mainframe 61, and two networked computers (remote

mainframe and networked PC/LAN). The only security system software operating in the system is operating systems security software 51 located on local mainframe 61. As a result it appears that all security functions are provided by the single computer, which can also be used by remote applications. If for any reason local mainframe 61 were to go down, the entire system would be inoperable. There is no teaching or suggestion in the Boitana patent to modify the system to provide a plurality of security providers.

The Boitana patent does not teach or suggest one or a plurality of security brokers. The function and structure of a security broker is defined in claim 18 and above. The Office Action suggests that Boitana does teach a security broker and cites to the specification at column 7, line 67-column 8, line 9 and references intermediate security transactions in fig. 6. Neither of these teach or suggest a security broker. Fig. 6 illustrates conversion utilities including an application specific "application interpreter utility" 73 and a "grouping utility" 77. The conversion utilities convert application security definitions 71 into a variety of security profiles, security rules, and security groups 79. Neither of these conversion utilities are security brokers, nor do they perform the functions of a security broker.

In addition, claim 18 states that each security broker is a computer in network communication with the computer workstations and the security providers. The system of the Boitana patent does not disclose a security broker being a computer in network communication with the computer workstations and the security providers.

Therefore, in order to maintain the rejection of claim 18 under § 103(a) one or more additional references must be provided to supply the deficiencies of the Boitana patent. In addition, there must be some suggestion or motivation to modify the Boitana patent.

The Office Action suggests that the Goldberg patent supplies the deficiencies at column 7, lines 4-27 and lines 41-49. However, the Goldberg patent does not teach or suggest a plurality of security brokers nor a plurality of security providers.

The system of the Goldberg patent is illustrated in Fig. 2. The system includes a single workstation 18, which includes launcher 32 and data storage 30. The workstation is connected to a

number of non-natively secured applications 20 (labeled as “host” applications) via intranet 24. When a user desires to access one of host applications 20 they request access via launcher 32 operating on workstation 18. Workstation 18 utilizes data store 30 and enterprise log-in database 28 to determine access rights for applications 20. Therefore, it can be seen that the structure and operation of the Goldberg security system is much different than that defined in claim 18. Nowhere is there a teaching or suggestion for a plurality of security brokers for receiving permissions requests from the workstations, routing permissions requests to one of the authentication/authorization managers, and passing authorized permissions to the workstations. There is no teaching or suggestion of a security broker being a computer in network communication with the computer workstations and the security providers. There is also no teaching or suggestion of a plurality of security providers, but rather a single security system operating on workstation 18. Therefore, the rejection of claim 18 under 35 U.S.C. § 103(a) should be withdrawn because neither the Boitana nor the Goldberg patents teach or suggest each and every element of claim 18.

Dependent claims 19-22 all depend from allowable independent claim 18 and are therefore allowable.

II. Method Claims 1-8, 10-13, 15-17, and 23-26

In the Office Action independent claims 1 and 13 were rejected under 35 U.S.C. § 103 (a) as being obvious over the combination of the Moriconi patent and the Goldberg patent. With this Amendment, claim 1 has been amended to provide proper antecedent basis for the phrase “the data store,” as described above, as well as to make a number of other modifications. Neither the Moriconi patent nor the Goldberg patent teach or suggest each and every element of independent claim 1. For example, the elements of claim 1 involving the operation of a security broker or a security provider are not taught or suggested by the Moriconi patent or the Goldberg patent because neither of these contain a security broker or a plurality of security providers.

Claim 1 recites a method for providing computer application security including determining access rights to secured resources. Determining access rights includes: (1) receiving a permissions request from a work station and routing the permissions request to one of a plurality of security providers with one

of the security brokers, (2) authenticating a computer user as a valid user with one of the security providers, (3) and authorizing the user to access one of the secured resources with one of a plurality of security providers. The Office Action asserts that these features of independent claim 1 are disclosed in the Goldberg patent. Specifically the Office Action cites the specification of the Goldberg patent at column 6, lines 51-54 and column 7, lines 4-17. However, these steps of determining access rights involving a plurality of security providers and a plurality of security brokers are not taught by the Goldberg patent because the Goldberg patent does not include these components. The Goldberg patent includes a workstation 18, which accesses data store 30 and enterprise log in database 28 to determine all access rights and privileges for a user interacting with workstation 18. The system of the Goldberg patent does not describe a method of determining access rights comprising receiving a permissions request from a workstation and routing the permissions request to one of a plurality of security providers with one of the security brokers. It also does not describe authenticating a computer user as a valid user with one of the security providers. And finally it does not describe authorizing the user to access one of the secured resources with one of a plurality of security providers. Because these features of independent claim 1 are not taught or described by either the Moriconi patent or the Goldberg patent, claim 1 is in condition for allowance.

Claim 13 recites a method for providing computer security including determining access privileges to a plurality of resources. The method includes authenticating a user on the system with one of a plurality of security providers, authorizing access rights to the secured resources in the software application with one of a plurality of security providers, and receiving a permissions request from one of a plurality of workstations and routing the permissions request to one of the security providers with one of a plurality of security brokers.

The Office Action suggests that these features are disclosed by the Goldberg patent, such as at columns 6, lines 51-54 and column 7, lines 4-17. However, the Goldberg patent does not teach or suggest a plurality of security brokers or a plurality of security providers that perform the steps for determining access privileges to a plurality of resources, as described above. Therefore, claim 13 is in condition for allowance.

In the Office Action, independent claim 23 was rejected under 35 U.S.C. § 103(a) as being obvious over the combination of the Boitana patent and the Goldberg patent. The structure and operation of the Boitana patent and the Goldberg patent were described above with reference to the rejection of independent claim 18.

Claim 23 is directed toward a process for authorizing access rights to secured resources in a software application. Among other things, the claim includes method steps involving the operation of a security provider and a security broker. Neither the Boitana patent nor the Goldberg patent teach or suggest a plurality of security providers or a security broker and therefore, claim 23 is in condition for allowance.

Dependent claims 2-8, 10-12, 15-17, and 24-26 all depend from allowable independent claims 1, 3, or 23 and are therefore also allowable.

CONCLUSION

In view of the forgoing, this application containing pending claims 1-8, 10-13, and 15-26 is in condition for allowance. Reconsideration and notice to that effect is respectively requested.

Respectfully submitted,

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